

JENKINS
WILSON
TAYLOR
& HUNT

patent attorneys

May 22, 2006



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Jansen E. Averett

Jansen E. Averett

Date of Signature: May 22, 2006

RICHARD E. JENKINS

JEFFREY L. WILSON

ARLES A. TAYLOR, JR.

GREGORY A. HUNT

E. ERIC MILLS

BENTLEY J. OLIVE

*CHRIS PERKINS, PH.D.

**JAMES DALY IV, PH.D.

JEFFREY CHILDERS, PH.D.

P. ASHLEY DARDEN

CHRISTOPHER B. LEE

***DAVID M. SIGMON

TECHNICAL SPECIALIST
AMY ODENBAUGH, PH.D.

*LICENSED ONLY IN CA

**LICENSED ONLY IN KY

***LICENSED ONLY IN SC

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Re: U.S. Patent Application Serial No. 10/567,424 for
MUTATIONS IN ION CHANNELS
Our Ref. No. 1386/23

Sir:

Please find enclosed in connection with the subject U.S. patent application the following documents:

1. Information Disclosure Statement (2 pages);
2. Form PTO-1449 (3 pages) in duplicate;
3. Copies of cited references (33 references); and
4. A return-receipt postcard to be returned to us with the U.S. Patent and Trademark Office filing stamp thereon.

The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. **50-0426**.

Respectfully submitted,

JENKINS, WILSON, TAYLOR & HUNT, P.A.

Arles A. Taylor, Jr.

Arles A. Taylor, Jr.

Registration No. 39,395

AAT/jea

Enclosures

Customer No: 25297



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Jansen E. Averett

Jansen E. Averett
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Mulley et al.

Group Art Unit: unknown

Serial No.: 10/567,424

Examiner: unknown

Filed: February 6, 2006

Docket No.: 1386/23

Confirmation No.: unknown

For: MUTATIONS IN ION CHANNELS

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. 1.56, 1.97, and 1.98, applicants' undersigned attorney brings to the attention of the Patent and Trademark Office the documents listed on the attached Form PTO-1449. Copies of the references as well as Form PTO-1449 are attached hereto. This is not to be construed as a representation that a search has been made or that a reference is relevant merely because cited.

Early passage of the subject application to issue is earnestly solicited.


Serial No.: 10/567,424

Although it is believed that no fee is due, the Commissioner is hereby authorized to charge any fees associated with the filing of this Information Disclosure Statement to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS, WILSON, TAYLOR & HUNT, P.A.

Date: 05/22/2006

By: 
Arles A. Taylor, Jr.
Registration No. 39,395

AAT/jea

Enclosures

Customer No: 25297



FORM PTO-1449 U.S. Department of Commerce
Patent and Trademark Office

List of Documents Cited by Applicant

Application No.:	10/567,424
Filing Date:	February 6, 2006
First Named Inventor:	Mulley et al.
Group:	
Examiner:	
Attorney Docket No.:	1386/23

U.S. PATENT DOCUMENTS

Examiner Initial	Cite No.	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, where relevant passages or relevant figures appear

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number (country code, no., kind code (if known))	Publication Date	Name of Patentee or Applicant	Pages, columns, lines where relevant passages appear	T

OTHER DOCUMENTS

Examiner Initials	Cite No.	Include Author (in CAPITAL LETTERS), Title, Journal, Date, Pertinent Pages, Etc.	T
	1	BREAKER ET AL., "A DNA enzyme with MG ²⁺ -dependent RNA phosphoesterase activity", <u>Chemistry & Biology</u> , 2 : 655-660, October 1995.	
	2	COLE ET AL., "Human monoclonal antibodies", <u>Molecular and Cellular Biochemistry</u> , 62 : 109-120, 1984.	
	3	COTE ET AL., "Generation of human monoclonal antibodies reactive with cellular antigens", <u>Proceedings of the National Academy of Sciences USA</u> , 80 : 2026-2030, April 1983.	
	4	GAMPER ET AL., "Calmodulin mediates Ca ²⁺ dependent modulation of M-type K ⁺ channels", <u>The Journal of General Physiology</u> , 122 : 17-31, July 2003.	

5	GOLDMAN ET AL., "In vitro and in vivo gene delivery mediated by a synthetic polycationic amino polymer", <u>Nature Biotechnology</u> , 15 : 462-466, May 1997.
6	GONZÁLEZ ET AL., "Cell-based assays and instrumentation for screening ion-channel targets", <u>DDT</u> , 4(9) : 431-439, September 1999.
7	HAMILL ET AL., "Improved patch-clamp techniques for high-resolution current recording from cells and cell-free membrane patches", <u>European Journal of Physiology</u> , 391 : 85-100, 1981.
8	HASELOFF ET AL., "Simple RNA enzymes with new and highly specific endoribonuclease activities", <u>Nature</u> , 334 : 585-591, August 1988.
9	HELLER ET AL., "Discovery and analysis of inflammatory disease-related genes using cDNA microarrays", <u>Proceedings of the National Academy of Sciences USA</u> , 94 : 2150-2155, March 1997.
10	HUSE ET AL., "Generation of a large combinatorial library of the immunoglobulin repertoire in phage lambda", <u>Science</u> , 246 : 1275-1281, December 1989.
11	ITALIAN LEAGUE AGAINST EPILEPSY GENETIC COLLABORATIVE GROUP, "Concordance of clinical forms of epilepsy in families with several affected members", <u>Epilepsia</u> , 34(5) : 819-826, 1993.
12	JENTSCH THOMAS J., "Neuronal KCNQ potassium channels: physiology and role in disease", <u>Neuroscience</u> , 1 : 21-30, October 2000.
13	KASAI ET AL., "Genomic structures of SCN2A and SCN3A- candidate genes for deafness at the DFNA16 locus", <u>Gene</u> , 264 : 113-122, 2001.
14	KÖHLER ET AL., "Continuous cultures of fused cells secreting antibody of predefined specificity", <u>Nature</u> , 256 : 495-497, August 1975.
15	KOZBOR ET AL., "Specific immunoglobulin production and enhanced tumorigenicity following ascites growth of human hybridomas", <u>Journal of Immunological Methods</u> , 81 : 31-42, 1985.
16	OHYA ET AL., "Diverse essential functions revealed by complementing yeast calmodulin mutants", <u>Science</u> , 263 : 963-966, February 1994.
17	ORLANDI ET AL., "Cloning immunoglobulin variable domains for expression by the polymerase chain reaction", <u>Proceedings of the National Academy of Sciences USA</u> , 86 : 3833-3837, May 1989.
18	PALFI ET AL., "Differential calmodulin gene expression in the rodent brain", <u>Life Sciences</u> , 70 : 2829-2855, 2002.
19	PHILLIPS ET AL., "CHRNA2 is the second acetylcholine receptor subunit associated with autosomal dominant nocturnal frontal lobe epilepsy", <u>American Journal of Human Genetics</u> , 68 : 225-231, 2001.

20	RICKERT ET AL., "B lymphocyte-specific, Cre-mediated mutagenesis in mice", <u>Nucleic Acids Research</u> , 25(6) : 1317-1318, 1997.
21	ROGER ET AL., "Epileptic syndromes in infancy, childhood and adolescence", <u>British Library Cataloguing in Publication Data</u> , 2 : 409-413, 1992.
22	SCHARF ET AL., "6 heat stress promoters and transcription factors", <u>Results and Problems in Cell Differentiation</u> , 20 : 125-162, 1994.
23	SCHENA ET AL., "Parallel human genome analysis: microarray-based expression monitoring of 1000 genes", <u>Proceedings of the National Academy of Sciences USA</u> , 93 : 10614-10619, October 1996.
24	SCHMITT ET AL., "A recessive C-terminal Jervell and Lange-Nielsen mutation of the KCNQ1 channel impairs subunit assembly", <u>The EMBO Journal</u> , 19(3) : 332-340, 2000.
25	SCHWAKE ET AL., "Surface expression and single channel properties of KCNQ2/KCNQ3, M-type K ⁺ channels involved in epilepsy", <u>The Journal of Biological Chemistry</u> , 275(18) : 13343-13348, 2000.
26	SCHWENK ET AL., "A cre-transgenic mouse strain for the ubiquitous deletion of loxP-flanked gene segments including deletion in germ cells", <u>Nucleic Acids Research</u> , 23(24) : 5080-5081, 1995.
27	TOUTENHOOFD ET AL., "The calmodulin multigene family as a unique case of genetic redundancy: multiple levels of regulation to provide spatial and temporal control of calmodulin pools?", <u>Cell Calcium</u> , 28(2) : 83-96, 2000.
28	WALLACE ET AL., "Neuronal sodium-channel $\alpha 1$ -subunit mutations in generalized epilepsy with febrile seizures plus", <u>American Journal of Human Genetics</u> , 68 : 859-865, 2001.
29	WEN ET AL., "Calmodulin is an auxiliary subunit of KCNQ2/3 potassium channels", <u>The Journal of Neuroscience</u> , 22(18) : 7991-8001, September 2002.
30	WINTER ET AL., "Man-made antibodies", <u>Nature</u> , 349 : 293-299, January 1991.
31	WYMAN ET AL., "A highly polymorphic locus in human DNA", <u>Proceedings of the National Academy of Sciences USA</u> , 77(11) : 6754-6758, November 1980.
32	YUS-NÁJERA ET AL., "The identification and characterization of a noncontinuous calmodulin-binding site in noninactivating voltage-dependent KCNQ potassium channels", <u>The Journal of Biological Chemistry</u> , 277(32) : 28545-28553, 2002.
33	INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY, corresponding to PCT application no. PCT/AU2004/00151 dated Feb. 23, 2006.

EXAMINER _____ DATE CONSIDERED _____

*Examiner Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.